THE MINERAL INDUSTRY OF BANGLADESH

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Bangladesh's economy grew at a rate of 5.4% in terms of gross domestic product in 2004. Food grains output and remittances from overseas Bangladeshis remained steady. Inflation was still high at 6.1% in 2004. The Government planned to increase the tax base because fewer than 1 million out of a population of 140 million paid taxes. Strikes and serious infrastructure bottlenecks impeded industrial production and foreign investment. The Government was under pressure from international oil firms and donors to sell natural gas to India to raise funds for national development. Trade deficits with India continued to widen as imports continued to outpace exports. The Government allowed limited exports of natural gas to India and permitted transshipment of goods between India's hinterland and Bangladesh's northeast (Far Eastern Economic Review, 2004).

Tata Group of India was considering investing $2 billion in Bangladesh for a 1,000-megawatt (MW) gas-fired powerplant, a 2.4-million-ton-per-year (Mt/yr) steel mill, and a 1-Mt/yr fertilizer plant by yearend. The proposed powerplant would provide electricity to Bangladesh and eastern India. Production from the fertilizer plant would be used for Bangladesh's agricultural needs and for exports. Construction of these facilities could take 4 years (Reuters, 2004§[1]).

The Government wanted to ensure that Bangladesh had an adequate gas supply for its domestic needs before it committed to guarantee gas supply for a 20-year period to the Tata type project. Petrobangla estimated an additional 4.1 million cubic meters per day of gas output would become available by the first quarter of 2005. Bangladesh's gas demand was expected to reach between 39.6 million and 42.5 million cubic meters per day by 2006 compared with 2004 consumption of 35.9 million cubic meters per day. The country had proven gas reserves of 433 billion cubic meters (Platts, 2004§).

Wartsila Corp. of Finland was awarded a contract by Larfarge Surma Cement Ltd. to deliver a 30-MW powerplant for a new cement plant at Chhatak in northeastern Bangladesh. The contract for engineering, procurement, and construction was worth $16.9 million. The powerplant, which would comprise four gas engines and two diesel engines, was due for completion in the first quarter of 2005. The new cement plan would have a production capacity of 1.2 Mt/yr. The raw material would be transported from its own quarry by a 17-kilometer (km) conveyor belt (Wartsila Corp., 2004).

The Bangladesh Geological Survey discovered a coal deposit in Dianpur that was estimated to contain 50 million metric tons (Mt). The deposit comprised three seams, and further drilling was in progress to determine the extent of the deposit (Mining Journal, 2004).

Asia Energy plc., which was 25.6% owned by Deepgreen Minerals Corp. Ltd. of Australia, began a feasibility study on its 100%-owned Phulbari coal project in northwestern Bangladesh in July. The coal basin contained more than 400 Mt of resources. In situ coal resources were estimated to be 370 Mt. The company had agreements with the Government to develop and exploit the coal deposit. The project is located 30 meters (m) above sea level. Production scale called for between 9 and 15 Mt/yr of coal, which was to be sold to the local and export markets. The project could be brought into production by 2009. Asia Energy also intended to participate in the development of a coal-fired powerplant that would have the capacity to generate a total of 2,500 MW during the next 40 years (Deepgreen Minerals Corp. Ltd., 2004).

Tullow Oil plc's Lalmai-3 exploration well in Block 9 onshore Bangladesh reached its proposed total depth of 2,800 m in May. Tullow Bangladesh Ltd. (30%) was the operator with coventurers Niko Exploration Ltd. (60%) and Bangladesh Petroleum Exploration and Production Ltd. (BAPEX) (10%). The wireline logs identified potential gas-bearing sands in a number of zones between 2,200 and 2,800 m. Production test results were encouraging (Tullow Oil plc, 2004§).

Tullow Oil subsequently discovered gas in the Lalmai-3 well, which followed dry gas at rates of up to 243,000 cubic meters per day from a zone at 2,420 to 2,460 m. The discovery was close to existing pipelines, and there was a ready market in Bangladesh for any available gas. In June, Tullow Oil also was drilling the Bangora-1 well, which is located 40 km north of Lalmai-3 on the same 40-km anticlinal structure. The company had a 30% interest in the Bangora well and was the operator (Tullow Oil plc, 2004a).

The Bangora-1 well reached a depth of 3,635 m in July. Preliminary logging indicated the likely presence of gas-bearing sands in the primary target zone. Seasonal rain suspended all drilling activities. In November, Tullow Oil discovered gas in the well, which was encountered in the three gas-bearing reservoirs between 2,580 and 3,285 m. Production tests recorded an aggregate flow rate of 3.4 million cubic meters per day. Gas quality was high with 99.13% combustible gases (Tullow Oil plc, 2004b).

Niko Resources Ltd. of Canada discovered gas in the abandoned Feni Gasfield in Block 15, which is located 125 km southeast of Dhaka in eastern Bangladesh, and planned to produce between 283,000 and 425,000 cubic meters per day from the field in mid-June and reach 1.13 million cubic meters per day in the fourth quarter of 2004. Niko Resources (50%) signed an agreement with BAPEX (50%) to explore for gas in October 2003. Niko Resources invested $15 million in the project. The reserves in the field were estimated to be 28.3 billion cubic meters. The joint venture also would explore another gasfield at Chhatak in northeastern Bangladesh (Rigzone, 2004§).

The Government opposed exporting natural gas to India despite having proven reserves of 340 billion cubic meters in the country because it feared the reserves were not enough for future use. Production averaged 33.4 million cubic meters per day at below capacity in 2003 (the year for which the latest data were available). Output could be stepped up considerably if exports were allowed (Petroleum Economist, 2004).

The Government was likely to approve the project for laying a pipeline for transmission of natural gas to India from Burma through Bangladesh. Natural gas was to be transmitted from the Akyab area in Burma through a section of the gas network in Bangladesh to

[1]References that include a section mark (§) are found in the Internet References Cited section.

India’s State of West Bengal. An Indo-Korean consortium discovered gas reserves offshore Burma and planned to invest $800 million in the gas transmission project (Alexander’s Gas & Oil Connections, 2004§).

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Major Sources of Information

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Dhaka, Bangladesh
Telephone: 880 2 814936

Bangladesh Petroleum Corp.
GPO Box 2003
Dhaka, Bangladesh
Telephone: 880 2 235717

Geological Survey of Bangladesh
153 Pioneer Rd.
Dhaka, Bangladesh
Telephone: 880 2 406201

Ministry of Energy and Mineral Resources
Dhaka, Bangladesh
Telephone: 880 2 404051

Major Publications

Bangladesh Bureau of Statistics, Dhaka:
- Monthly Statistical Bulletin of Bangladesh.
- Statistical Yearbook of Bangladesh.

TABLE 1

BANGLADESH: ESTIMATED PRODUCTION OF MINERAL COMMODITIES[1]

(Metric tons unless otherwise specified)

Commodity[2]		2000	2001	2002	2003	2004
Cement, hydraulic[3]		3,580,000 [4]	5,005,000 [4]	5,000,000	5,000,000	5,000,000
Clays, kaolin[3]		7,900	8,000	8,100	8,200	8,300
Gas, natural, marketed[3, 5]	million cubic meters	6,500	7,000	7,200	7,300	7,100
Iron and steel, metal:[3]						
Steel, crude, ingot only		35,000	30,000	30,000	25,000	25,000
Steel products		90,000	80,000	80,000	70,000	70,000
Nitrogen, N content of urea, ammonia, ammonium sulfate		1,254,800 [4]	1,273,000 [4]	1,288,500 [4]	1,388,700 [4]	1,379,500 [4]
Petroleum:						
Crude	thousand 42-gallon barrels	1,500	1,550	1,600	1,800	1,700
Refinery products	do.	8,700	8,800	8,900	9,000	9,100
Salt, marine[3]		350,000	350,000	350,000	350,000	350,000
Stone, limestone[3]		28,000	30,000	32,000	34,000	36,000

[1]Estimated data are rounded to no more than three significant digits. Table includes data available through June 1, 2005.

[2]In addition to the commodities listed, crude construction materials, such as sand and gravel and other varieties of stone, presumably are produced, but available information is inadequate to make reliable estimates of output levels.

[3]Data are for years ending June 30 of that stated.

[4]Reported figure.

[5]Gross production is not reported; the quantity vented, flared, or reinjected is believed to be negligible.